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| AR 175 Project Planning and Management  | **L-T-P** **2-1-0** **3 credit**  |
| **Unit-1 (Concept of Construction Management)** Objectives of Construction Management, Historical Background, Relevance and importance of management skills in the present day profession, Players and relationships between them in the building construction industry, Role of Architect in Construction Management, various building practices and the **Unit-2 (Current management system)** Scheduling of construction, Planning of construction site. Advantages of network Management, network analysis, elements of network, network rules, constraints, errors in network, construction of networks (a simple Building) **Unit-3 (CPM & PERT)** CPM: Critical path analysis, Project duration, Construction of CPM Calendar, Activity times and FLOATS, Optimization through CPM Techniques, PERT Technology: PERT AND Three time estimates, beta distribution curve , Slack in PERT, Critical Path Analysis of a PERT network, Central Limit Theorem, Probability of completion of projects, CPM / PERT: Difference between CPM & PERT, Bar chart versus network, resource allocation and resource leveling, Controlling and monitoring, Updating. Project time, cost and finance management. **Unit-4 (Cumputer applications of project management)** Computer applications of project scheduling and management. Introduction to new trends and research in construction management.  |
| Reference Books : Construction Planning and Management by DrU.K.Srivastava, Galgotia Publication Pvt Ltd, New Delhi  |